Page 1 of 8



RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/804,014A

TIME: 09:31:35

Input Set : A:\Cura-221.app

Output Set: N:\CRF3\05072002\I804014A.raw

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3 <110> APPLICANT: Li, Li
             Padigaru, Muralidhara
      5
             Vernet, Corine
      6
             Fernandes, Elma
              Shimkets, Richard
     7
     8
              Spaderna, Steven
             Majumder, Kumud
     9
    11 <120> TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoding Same
    13 <130> FILE REFERENCE: 15966-721 US
    15 <140> CURRENT APPLICATION NUMBER: 09/804,014A
C--> 16 <141> CURRENT FILING DATE: 2002-04-24
    18 <150> PRIOR APPLICATION NUMBER: 60/188,316
    19 <151> PRIOR FILING DATE: 2000-03-10
    21 <150> PRIOR APPLICATION NUMBER: 60/188,277
    22 <151> PRIOR FILING DATE: 2000-03-10
    24 <150> PRIOR APPLICATION NUMBER: 60/189,139
    25 <151> PRIOR FILING DATE: 2000-03-14
    27 <150> PRIOR APPLICATION NUMBER: 60/189,140
    28 <151> PRIOR FILING DATE: 2000-03-14
     30 <150> PRIOR APPLICATION NUMBER: 60/190,401
    31 <151> PRIOR FILING DATE: 2000-03-17
    33 <150> PRIOR APPLICATION NUMBER: 60/190,231
    34 <151> PRIOR FILING DATE: 2000-03-17
    36 <160> NUMBER OF SEQ ID NOS: 75
    38 <170> SOFTWARE: PatentIn Ver. 2.1
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    42 <212> TYPE: DNA
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    48 tqtcctqttt tqqatqctat ctaacatctt catqttcaac ccagagaaga aacatcccgc 180
    49 cgttgccctg gggccctctc atcccacagc aggtttcgag ccttccccag ccctcgggat 240
    50 ggacaaccct tgagaagcag aggtcaggga accctgaccc cgccaccctt gcccaggcca 300
    51 tecgetgeee teacaggeae agacagaagg cetetgteeg tggccaggge actecatggg 360
    52 gaagaaacag geeetgttee etecetgete accaetteae eeageteage tggeacaaaa 420
    53 atactgccac cacaccttca ccctgcctag cccaacctgg cagggcctcg gagtagcctg 480
    54 ccaqctaaaa tacgggttgc ccagataact gtgaatgtca gataagaatc ttctgggacg 540
    55 agtatgtccc atgccatatt tgggacatac ttacactaat aaatttctgt ttatctgaaa 600
    56 ctcaaatttg cctgggcgtc ctgtactttt cttaactaaa tttggtgcct ctacacacaa 660
    57 ggtccctggg gtggggggc acaggagcaa gccccttccc aggctgggtc cctgccggca 720
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58 totoccacag gocaggactg gocaccoaga tggagocogt gocaggoago oggogacaga 780

Input Set : A:\Cura-221.app

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60 aatccagacg cccacctccc cgagcgagca ccaagacagg aagccaacct gcaatgccca 900
61 gcccactgcg accacagggc tctgccgggg tcctgccgga acccagggtt ccggtccaga 960
62 agccaqqqat aaatgccqct tctcctatag ggacagtcag agtagagagg gggaggccta 1020
63 cagteteace tgeagggaga ggaagteete ggggegggea egtgggggge etgaeagete 1080
64 cgagcacacc cggccacagt gaccacggac tgcacacgca gaagcagtct ggatcccacg 1140
65 cqtqqctqtq ctqccaqcaq acaqcaccca acctcccatg ctcctcatca caggaaaaga 1200
66 gaccagcagc atctctgcca ggcatggtgg ggcccctccg ccacagccta ggagtccagg 1260
67 ccacccaccc tcacagcact ggagtgcgtg ggtcagtgag gccctgggac gggcctgcgg 1320
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69 cctgtgtggg gcccagggga gctgcacctc cgggatggga caaggcaggg tcctggcttt 1440
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71 cccacaccat ggggaaaccg aggcatggga aggttggagg gggggcagcc aggctggcgc 1560
72 caaqatcaca qqcaqqcaqq cctqaaqqcc qaqcaatqca qccactaqqa aqqcatgagt 1620
73 tggggtcggg gtgtccccag ccctagagcc caaagctgcc accactcccc acccccaaca 1680
74 tgggtggggg cagggagagc tcttcttggg accaatccca aaaccatgcg cagtgggccc 1740
75 ggctggagcc caggcagcag gcatcctctc tgccagggtg agaaactggg ccctcatgtc 1800
76 aggctggaag gggggtctcc aggtggggag aaagaacagg aaggaaccag gccctccct 1860
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82 <211> LENGTH: 298
83 <212> TYPE: PRT
84 <213> ORGANISM: Homo sapiens
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                                    25
93 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala
            35
                                40
96 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
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99 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
                         70
                                             75
102 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
105 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
106
                100
                                    105
108 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
                                120
                                                    125
111 Ser His Ala Trp Leu Cys Cys Gln Gln Thr Ala Pro Asn Leu Pro Cys
                            135
                                                140
114 Ser Ser Ser Gln Glu Lys Arg Pro Ala Ala Ser Leu Pro Gly Met Val
                        150
                                            155
115 145
117 Gly Pro Leu Arg His Ser Leu Gly Val Gln Ala Thr His Pro His Ser
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                    165
120 Thr Gly Val Arg Gly Ser Val Arg Pro Trp Asp Gly Pro Ala Gly Thr
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Input Set : A:\Cura-221.app

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123 Gly Gly Gln Arg Val Arg Gly Gly Arg Arg Ser Pro Thr Lys Gly Ser
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126 Ser Gln Ala Cys Val Gly Pro Arg Gly Ala Ala Pro Pro Gly Trp Asp
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                                                220
129 Lys Ala Gly Ser Trp Leu Ser Ser Ala Thr Ala Gln Leu Pro Gln Gly
                        230
                                            235
130 225
132 Thr Lys Gly Arg Leu Arg Asp Glu Val Leu Thr His Thr Met Gly Lys
                                        250
                                                            255
135 Pro Arg His Gly Lys Val Gly Gly Ala Ala Arg Leu Ala Pro Arg
                                    265
                260
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138 Ser Gln Ala Gly Arg Pro Glu Gly Arg Ala Met Gln Pro Leu Gly Arg
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141 His Glu Leu Gly Ser Gly Cys Pro Gln Pro
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146 <211> LENGTH: 2092
147 <212> TYPE: DNA
148 <213> ORGANISM: Homo sapiens
150 <400> SEQUENCE: 3
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152 tggtaatggc ctgtccactg aaaagcagaa gccccacatg agcaagctgc aggcagctgg 120
153 caqqcaccqa ttcctqctqt cctqttttqq atgctatcta acatcttcat gttcaaccca 180
154 gagaagttte atcccgccgt tgccctgggg ccctctcatc ccacagcagg tttcaagcct 240
155 tocccagece tegggatgga caaceettga gaageagagg teagggaace etgaceeege 300
156 caccettgee caggecatee getgeeetea caggeacaga cagaaggeet etgteegtgg 360
157 ccagggcact ccatggggaa gaaacaggcc ctgttccctc cctgctcacc acttcaccca 420
158 gctcagctgg cacaaaaata ctgccaccac accttcaccc tgcctagccc aacctggcag 480
159 gqcctcqqaq taqcctqcca qctaaaatac gggttgccca gataactgtg aatgtcagat 540
160 aagaatette tgggacgagt atgteecatg ceatatttgg gacataetta caetaataaa 600
161 tttctqttta tctqaaactc aaatttqcct gggcgtcctg tacttttctt aactaaattt 660
162 ggtgcctcta cacacaaggt ccctggggtg ggggggcaca ggagcaagcc ccttcccagg 720
163 ctgggtccct gccggcatct cccacaggcc aggactggcc acccagatgg agcccgtgcc 780
164 aggcageegg egacagaegg acaaaggetg eteaggagae actgeaeace tteetette 840
165 ttgtctgggg gctcaagaat ccagacgccc acctccccga gcgagcacca agacaggaag 900
166 ccaacctgca atgcccaqcc cactgcgacc acagggctct gccggggtcc tgccggaacc 960
167 cagggttccg gtccagaagc cagggataaa tgccgcttct cctataggga cagtcagagt 1020
168 agaqaqqqqq aggcctacag tctcacctqc agggagagga agtcctcggg gcgggcacgt 1080
169 ggggggcctg acagctccga gcacacccgg ccacagtgac cacggactgc acacgcagaa 1140
170 gcagtctgga tcccacgcgt ggctgtgctg ccagcagaca gcacccaacc tcccatgctc 1200°
171 ctcatcacag gaaaagagac cagcagcatc tctgccaggc atggtggggc ccctccgcca 1260
172 cagcetagga gtccaggeca cecacectea cagcactgga gtgcgtgggt cagtgaggec 1320
173 ctgggacggg cctgcgggca cagggggaca gagggttcgg ggagggcggc gcagccccac 1380
174 gaagggetee teccaageet gtgtggggee eaggggaget geaceteegg gatgggaeaa 1440
175 ggcagggtcc tggctttcat cagccacagc acagctgcca cagggcacaa aaggacggct 1500
176 gagagacgag gtcctcaccc acaccatggg gaaaccgagg catgggaagg ttggaggggg 1560
177 ggcagccagg ctggcgccaa gatcacaggc aggcaggcct gaaggccgag caatgtagcc 1620
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179 actocccacc cocaacatgg gtgggggcag ggagagetet tettgggace aatoccaaaa 1740
180 ccatgcqcaq tqqqcccqqc tqqaqcccag gcagcaggca tcctctctgc cagggtgaga 1800
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Input Set : A:\Cura-221.app

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184 gccqctqqat ggggtacagg cccgccgccc cttctgagag gacaggggag gcccagagct 2040
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189 <211> LENGTH: 283
190 <212> TYPE: PRT
191 <213> ORGANISM: Homo sapiens
193 <400> SEQUENCE: 4
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200 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala
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203 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
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206 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
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                                            75
209 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
212 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
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215 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
                               120
           115
218 Ser His Ala Trp Leu Cys Cys Gln Gln Thr Ala Pro Asn Leu Pro Cys
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221 Ser Ser Ser Gln Glu Lys Arg Pro Ala Ala Ser Leu Pro Gly Met Val
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                                           155
224 Gly Pro Leu Arg His Ser Leu Gly Val Gln Ala Thr His Pro His Ser
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                                       170
227 Thr Gly Val Arg Gly Ser Val Arg Pro Trp Asp Gly Pro Ala Gly Thr
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230 Gly Gly Gln Arg Val Arg Gly Gly Arg Arg Ser Pro Thr Lys Gly Ser
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           195
233 Ser Gln Ala Cys Val Gly Pro Arg Gly Ala Ala Pro Pro Gly Trp Asp
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                                               220
236 Lys Ala Gly Ser Trp Leu Ser Ser Ala Thr Ala Gln Leu Pro Gln Gly
                       230
                                           235
237 225
239 Thr Lys Gly Arg Leu Arg Asp Glu Val Leu Thr His Thr Met Gly Lys
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242 Pro Arg His Gly Lys Val Gly Gly Gly Ala Ala Arg Leu Ala Pro Arg
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251 <212> TYPE: DNA
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Input Set : A:\Cura-221.app

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257 gaatecaqae geecacetee eegagegage accaagacag gaagecaace tgeaatgeee 180
258 agcccactgc gaccacaggg ctctgccggg gtcctgccgg aacccagggt tccggtccag 240
259 aagccaggga taaatgccgc ttctcctata gggacagtca aggtagagag ggggaggcct 300
260 acagteteae etgeagggag aggaagteet eggggeggge aegtgggggg cetgaeaget 360
261 ccgagcacac ccggccacag tgaccacgga ctgcacacgc agaagcagtc tggatcccac 420
262 gcgtggctgt gctgccagca gacagcaccc aacctcccat gctcctcatc acaggaaaag 480
263 agaccagcag catctctgcc aggcatggtg gggcccctcc gccacagcct aggagtccag 540
264 gccacccacc ctcacagcac tggagtgcgt gggtcagtga ggccctggga cgggcctgcg 600
265 ggcacagggg gacagagggt tcggggaggg cggcgcagcc ccacgaaggg ctcctcccaa 660
266 gcctgtgtgg ggcccagggg agctgcacct ccgggatggg acaaggcagg gtcctggctt 720
267 tcatcageca cageacaget gecacaggge acaaaaggae ggetgagaga egaggteete 780
268 acccacacca tggggaaacc gaggcatggg aaggttggag ggggggcagc caggctggcg 840
269 ccaagatcac aggcaggcag gcctgaaggc cgagcaatgc agccactagg aaggcatgag 900
270 ttggggtcgg ggtgtcccca gccctagagc ccaaagctgc caccactccc cacccccaac 960
271 atgggtgggg gcagggagag ctcttcttgg gaccaatccc aaaaccatgc g
274 <210> SEQ ID NO: 6
275 <211> LENGTH: 298
276 <212> TYPE: PRT
277 <213> ORGANISM: Homo sapiens
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289 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
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292 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
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295 Gly Thr Val Lys Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
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298 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
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301 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
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                                                    125
304 Ser His Ala Trp Leu Cys Cys Gln Gln Thr Ala Pro Asn Leu Pro Cys
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307 Ser Ser Ser Gln Glu Lys Arg Pro Ala Ala Ser Leu Pro Gly Met Val
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310 Gly Pro Leu Arg His Ser Leu Gly Val Gln Ala Thr His Pro His Ser
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313 Thr Gly Val Arg Gly Ser Val Arg Pro Trp Asp Gly Pro Ala Gly Thr
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316 Gly Gly Gln Arg Val Arg Gly Gly Arg Arg Ser Pro Thr Lys Gly Ser
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Input Set : A:\Cura-221.app

Output Set: N:\CRF3\05072002\1804014A.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the  $\langle 220 \rangle$  to  $\langle 223 \rangle$  fields of each sequence which presents at least one n or Xaa.

Seq#:40; Xaa Pos. 20

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/804,014A

DATE: 05/07/2002 TIME: 09:31:36

Input Set : A:\Cura-221.app

Output Set: N:\CRF3\05072002\1804014A.raw

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:2119 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:16